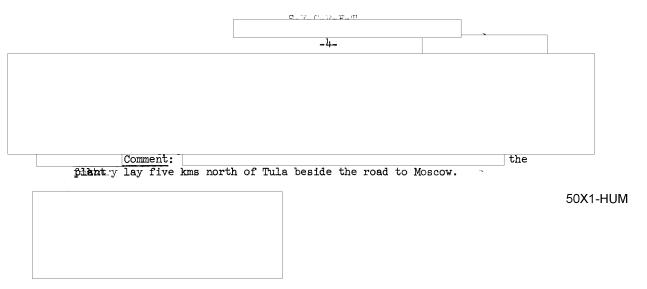
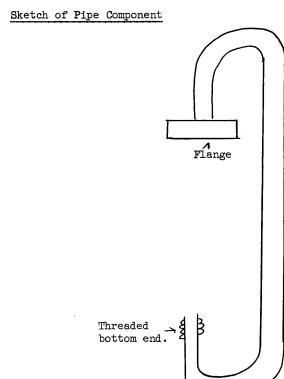


Plants at Tula and Bryansk with Reported GM Connections; Priborov Plant at Moscow  NO. PAGES REQUIREMENT NO.  REFERENCES  50X1-HUM  ARE ACO.  SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.  50X1-HUM  1. In the assembly shop of the Tula plant, the cylinders were lifted from cradle to cradle as each assembly process was completed. I  2. Inside the cylinder assembly shop of the Tula plant, there were two parallel lines of assembly with four objects on each line, spaced about one mapart from each other. The space between the lines and the outside walls was 50X1-H narrower than that between the two lines themselves, but the distance was such that there was plently of room between the walls and the assembly lines to allow men to work on the articles. The lines were situated in the center section of the large bay, and there was a considerable amount of empty floor space between the ends of the lines and the end walls of the building. At one end of the shop, there were desks covered with drawings, where Soviet officers set and worked. There was no other equipment or installations in the shop50X1-HU  S-E-C-R-E-T  50X1-HUM	NFO	RMATION	REPORT	INFORMA	TION	REPORI
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	S-E-C-R-E-T
	-2- 50X1-HUM
5.	the pipes were in one piece and not separate top 50X1-HUM and bottom pipes. The complete pipe component curved round and slightly back on itself at both ends (see sketch on page 4) and the procedure for fitting it to the cylinder was as follows. Firstly, the top cover of the cylinder was inserted over the lower end of the pipe, passed round the lower bend, up the length of the pipe, round the upper bend and down again, until it seated against the flagge at the upper end of the pipe. The bottom cover was then fitted to the cylinder and the threaded bottom end of the pipe was inserted into the threaded hole in the center of the bottom cover and screwed into place by moving the whole pipe component
	round and round the outside of the cylinder. When the bottom end of the pipe had thus been securely screwed into the bottom cover, the top cover was screwed into the top of the cylinder. The grooves inside the cylinder were about two 50X1-HUM tems wide and ten mm deep  The internal surface of the cylinder were cylinder.
	was finished to a high degree of polish. The grooves inside the cylinder were cut by some sort of lathe-cutting instrument.
6.	the Tula plant their shoulder boards were gold-colored with royal-blue piping down the center and round the edge. At the top of the shoulder boards there was a pair of crossed propellers in silver. A major were one star in the center of the shoulder board, a lieutenant colonel two stars side by side at the bottom of the shoulder board at the side of the central blue piping, and a full colonel the same as a lieutenant colonel with an additional third star over the central blue piping towards the top of the shoulder board. 50X1-HUM
	to as Ivan Ivanovich and Sergey Petrovich.
7.	The cyrillic lettering on the missiles was CN, and this was the same for the factory designation. 50X1-HUM
8.	
9. [	dark colored ingots, weighing about five or six kgs each, used to be delivered to the Priborov Plant in railroad cars  the secret shop at the Priborov Plant where rough 50X1-HUM east cylinders were processed.
	Blueprints of the sylinders were available in the shop to guide the checkers, but they bore no similar to but even brighter in color than, stainless steel. 50X1-HUM it was easier to work on the lathes than stainless steel. The top and bottom curves were made of the same material. The 50X1-HUM
	cylinders seemed to be fairly heavy and were moved on small trucks or by means of overhead pulleys and chains.  the cylinders could be moved by two men, who could shift them In short movements but not of course lift them completely offithe bench.  50X1-HUM
10	
10.	After inspection by Soviet officers, the cylinders were shipped away from the Priborov Plant in crates Shipping took place after the end of the day shift and before the workers arrived the Collowing morning, so that the crates could have been marked during the period the workers were not there.  50X1-HUM
Ll.	After being rough-cast in the foundry, the cylinders were sent on to the laboratory, they underwent some
l	sort of test there before being passed on to the secret processing workshop. 50X1-HUM
	S-E-C-R-E-T

	S-E-C-R-E-T	50X1-HUM
	-3-	
	When they arrived at the latter, they bore a bluish-colored mark cut by which might be on any part of the cylinder. The mark consisted of a cabout the size of a shilling, in the center of which were the cyrillic OTK, signifying that the cylinder had been tested and passed by the lat	ircle letters poratory.
		50X1-HUM
12.	There were a number of people working on each article within the cylind assembly shop at the Tula plant. About half of them, however, were approximately who were studying the work being done. The tempo of the work was leist the apprentices were allowed plenty of time to examine exactly what the were.	prentices arely, and
13.	The secret processing shop at the Priborov Plant worked one shift from 1600 hours with a lunch break from 1200 to 1300 hours. There was no no Soviet officers generally remained at the workshop after the end of the The rest of the factory worked three shifts of eight hours each, i.e., (1600 hours, 1600 to midnight, and midnight to 0800 hours.	lght shift. e shift.
14.	the cylinders were rough-cast in the foundry at the	Priborov
•		was placed which to solidify removed, apped 50X1-HUM rough some a similar 50X1-HUM
	temporarily stopped, as they were waiting for the delivery of pipes, wh made at the Tula plant.	olich were 50X1-HUM
15.	the location of the Tula plant marked with a reon the map of the town (Appendix A).  the plant lay between the railroad station a Upa River. It was about five kms away from his accommodation in the town the railroad station and the state of the state o	and the 50X1-HUM
16.	the Davidudh forter	
10.	the Bryansk factor  was close to the Bryansk re station. there were airfields near both the Tula and I factories	ailroad
17.	Neither the Tula nor the Bryansk factory looked newly constructed.	
	some buildings had been renovated and that new machine installed.	
18.	Personalities at the Priborov Eplant, are as follows:	50X1-HUM
	Viktor Ivanovich Sergerev - section chief of the cylinder processing sh	nop.
	Mitrofanov (fnu) - chief engineer of the secret processing shop.	50X1-HUM
	Andrew Ivanovich (Inu) - foreman of the processing shop.	
	S-E-C-R-E-T	50X1-HUM





S-E-C-R-E-T



Dorf Jap

## INFORMATION REPORT INFORMATION REPORT

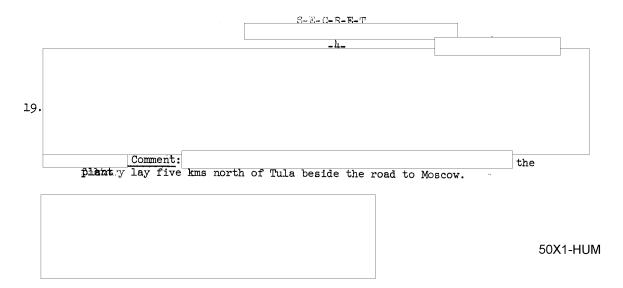
## CENTRAL INTELLIGENCE AGENCY

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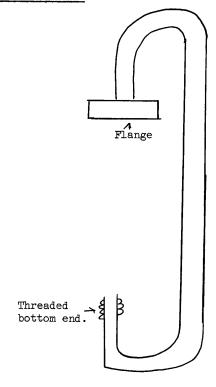
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1.	were lifted from cra	in the assembly adle to cradle as	shop of the Tule each assembly p	plant,	, the cyli as complet	sed.1
2.	Inside the cylinder lines of assembly wi from each other. The narrower than that be such that there was to allow men to work section of the large space between the end of the short the	assembly shop of th four objects of e space between the tween the two li- plenty of room be on the articles bay, and there of ds of the lines	the Tula plant on each line, sp the lines and th ines themselves, etween the walls . The lines wer was a consideral and the end wall	there oaced about the sand the re situate amounts. So the	were two at one m a e walls wa distance assembly ed in the t of empty building.	50X1-HU parallel part s was lines center floor At one
	Inside the cylinder lines of assembly wi from each other. The narrower than that is such that there was to allow men to work section of the large space between the enend of the shop, the sat and worked. The	assembly shop of th four objects of e space between the tween the two li- plenty of room be on the articles bay, and there of ds of the lines	the Tula plant on each line, specified the lines and the ines themselves, the lines were was a considerate and the end wall equipment or instance.	there acced about the sand the sand the colle amounts of the colle amounts of the colle amounts of the colle amounts tallation	were two ut one m s e walls wa distance assembly ed in the t of empty building. re Soviet hs in the	50X1-HU parallel part s was lines center floor At one
2.	Inside the cylinder lines of assembly wi from each other. The narrower than that is such that there was to allow men to work section of the large space between the enend of the shop, the sat and worked. The	assembly shop of th four objects of the space between the two less on the articles bay, and there adds of the lines are were desks contrely as no other ediameter of the cylindrical states of the cylindrical states are the same terms of the cylindrical states are the cylindrical sta	the Tula plant on each line, sp the lines and th ines themselves, etween the walls . The lines wer was a considerate and the end wall wered with drawic equipment or ins clinders was exa	there paced about the sand the re situate one one situate of the re situate one of the langs, when the sand the	were two ut one m s e walls wa distance assembly ed in the t of empty building. re Soviet hs in the	50X1-HU parallel part s was lines center floor At one officers shor 50X1-H
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3.	Inside the cylinder lines of assembly wi from each other. The narrower than that be such that there was to allow men to work section of the large space between the enend of the shop, the sat and worked. The	assembly shop of th four objects of e space between etween the two li plenty of room be on the articles bay, and there ds of the lines of re were desks con re was no other of iameter of the con  see the contract of the con	the Tula plant on each line, sp the lines and th ines themselves, etween the walls. The lines were was a considerate and the end wall vered with drawic equipment or ins clinders was exa	there paced about the sand the re situate one one situate one sand the re situate one sand the sand th	were two ut one m s e walls wa distance assembly ed in the t of empty building. re Soviet hs in the	50X1-HU parallel part s was lines center floor At one officers shor 50X1-H

	S-E-C-R-E-T
	-2-
5.	the pipes were in one piece and not separate top and bottom pipes. The complete pipe component curved round and slightly back on
	itself at both ends (see sketch on page 4) and the procedure for fitting it to the cylinder was as follows. Firstly, the top cover of the cylinder was inserted over the lower end of the pipe, passed round the lower bend, up the length of the pipe, round the upper bend and down again, until it seated against the flagge at the upper end of the pipe. The bottom cover was then fitted to the cylinder and the threaded bottom end of the pipe was inserted into the threaded hole in the center of the bottom cover and screwed into place by moving the whole pipe component round and round the outside of the cylinder. When the bottom end of the pipe had thus been securely screwed into the bottom cover, the top cover was screwed into the top of the cylinder. The grooves inside the cylinder were about two 50X1-HUM cms wide and ten mm deep  The internal surface of the cylinder were cut
	by some sort of lathe-cutting instrument. 50X1-HUM 50X1-HUM
6.	the Soviet officers in charge of the final assembly shop at the Tula plant their shoulder boards were gold-colored with royal-blue piping down the center and round the edge. At the top of the shoulder boards there was a pair of crossed propellers in silver. A major wore one star in the center of the shoulder board, a lieutenant colonel two stars side by side at the bottom of the shoulder board at the side of the central blue piping, and a full colonel the same as a lieutenant colonel with an additional third star over the central blue piping towards the top of the shoulder board. 50X1-HUM two of them referred
	to as Ivan Ivanovich and Sergey Petrovich.
7.	The cyrillic lettering on the missiles was CN, and this was the same for the factory designation.  50X1-HUM
8.	SOXT-HOIM
	dark colored ingots, weighing about five or six kgs each, used to be delivered to the Priborov Plant in railroad cars 50X1-HUM
9•	the secret shop at the Priborov Plant where rough 50X1-HUM cast cylinders were processed
	Blueprints of the cylinders were available in the shop to guide the checkers, but they bore no descriptive title, other than the word "cylinder". the metal 50X1-HUM of the cylinders similar to, but even brighter in color than, stainless steel 50X1-HUM it was easier to work on the lathes than
	stainless steel. The top and bottom curves were made of the same material. The cylinders seemed to be fairly heavy and were moved on small trucks or by means of overhead pulleys and chains.    The cylinders seemed to be fairly heavy and were moved on small trucks or by means the cylinders could be moved by two men, who could shift them
	in short movements but not of course lift them completely off the bench. 50X1-HUM
10.	
10.	in short movements but not of course lift them completely offithe bench.  50X1-HUM  After inspection by Soviet officers, the cylinders were shipped away from the  50X1-HUM  Priborov Plant in crates  Shipping took place after the end of the day shift and before the workers arrived the following morning, so that the crates could have been marked during the period the workers were not there.  After being rough—cast in the foundry, the cylinders were sent on to the laboratory,
	in short movements but not of course lift them completely offithe bench.  50X1-HUM  After inspection by Soviet officers, the cylinders were shipped away from the  50X1-HUM  Priborov Plant in crates  Shipping took place after the end of the day shift and before the workers arrived the following morning, so that the crates could have been marked during the period the workers were not there.

	S-E-C-R-E-T	
	-3-	50X1-HUM
	When they arrived at the latter, they bore a bluish-colored mark cut by acid, which might be on any part of the cylinder. The mark consisted of a circle about the size of a shilling, in the center of which were the cyrillic letters OTK. signifying that the cylinder had been tested and passed by the laboratory	50X1-HUM
£2.	There were a number of people working on each article within the cylinder assembly shop at the Tula plant. About half of them, however, were apprentice who were studying the work being done. The tempo of the work was leisurely, a the apprentices were allowed plenty of time to examine exactly what the proces were.	nd ses
-3•	The secret processing shop at the Priborov Plant worked one shift from 0800 ho 1600 hours with a lunch break from 1200 to 1300 hours. There was no night shi Soviet officers generally remained at the workshop after the end of the shift. The rest of the factory worked three shifts of eight hours each, i.e., 0800 to 1600 hours, 1600 to midnight, and midnight to 0800 hours.	it.
_4. [	the cylinders were rough-cast in the foundry at the Pribor Plant at the rate of about eight per day. Earthenware moulds were used, the obeing in two parts and the inner a cylindrical solid. The center mould was plin position vertically and the two outer halves placed round it, afterwinich a red liquid was poured into the space between the two moulds and left to solifor a period of 36 hours. The two outer halves of the mould were then removed and the cylinder remained set round the inner one. The cylinder was tapped repeatedly until the center mould broke up and was removed. leaving the roughcast cylinder.  form of steel. The top and bottom covers of the cylinders were cast by a similar the pipes were cast.  the pipes were cast.  assembly was temporarily stopped, as they were waiting for the delivery of pipes, which were	dify , me 50X1-HUM lar 50X1-HUM
.5•	made at the Tula plant.  the location of the Tula plant marked with a red cross on the map of the town (Appendix A).  the plant lay between the railroad station and the lima River. It was about five kms away from his accommodation in the town of I	50X1-HUM 50X1-HUM 50X1-HUM
.6.	the Bryansk factory  was close to the Bryansk railroad station. there were airrields near both the Tula and Bryansk factories	50X1-HUM
.7•	Neither the Tula nor the Bryansk factory looked newly constructed.  some buildings had been renovated and that new machinery had installed.	been
.8.		
	Viktor Ivanovich Sergegev - section chief of the cylinder processing shop.	
	Mitrofanov (fnu) - chief engineer of the secret processing shop.	
	Andrew Ivanovich (Pnu) - foreman of the processing shop.  S-E-C-R-E-T	
	Factor 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50X1-HUM



## Sketch of Pipe Component



S-E-C-R-E-T